Please provide the following information, and submit to the NOAA DM Plan Repository.

#### Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

#### 1. General Description of Data to be Managed

# **1.1. Name of the Data, data collection Project, or data-producing Program:**AFSC/RACE/EcoFOCI - Chlorophyll, ichthyoplankton and zooplankton samples from cruises 3MF05, 3TT05 and 8MF05

#### 1.2. Summary description of the data:

These data are part of a ocean observation study by Stabeno, Napp, and Whitledge sponsored, in part, by the North Pacific Research Board (Project 517; http://doc.nprb.org) . The grant was titled "Sentinels for Bering Sea ecosystem change." Moorings have been maintained on the southeastern Bering Sea shelf at four sites: M2 (56.9B0N, 164.1B0W) since 1995, M4 (57.9B0N, 168.9B0W) since 1996; M5 (59.9B0N, 171.7B0W) and; M8 (62. 2B0N 174.7B0W) since 2004. Shipboard measurements of temperature, salinity, nutrients, chlorophyll, fluorescence and zooplankton were collected around the moorings and along the 70-m isobath on 3 cruises (3MF05, 16 April b?? 7 May; 3TT05, May 12 - 28; 8MF05, 21 September b?? 4 October) to groundtruth the in situ sensors on the moorings. This long-term monitoring supports major findings: (1) Over the southeastern shelf, the timing of the spring phytoplankton bloom is determined by the presence of ice, with an early bloom occurring if ice is present after mid-March and a later bloom if there is no sea-ice after mid-March; (2) during 2001-2005, the southeastern Bering Sea shelf underwent a marked warming (~3B0C) that was closely associated with a decrease of sea ice; with shifts in the atmospheric forcing, colder conditions returned to the Bering Sea shelf in the winter 2006 and continued into winter/ spring 2007; (3) nutrients supply and summer salinity over the shelf has not significantly changed during the last three decades; (4) in association with the warming there is an indication that the abundance of cold-water zooplankton species (e.g. Calanus marshallae) has been reduced; (5) from hydrography collected in May and September 2005 along the 70 m isobath starting at M2 in the south and ending at M8 in the north, it is evident that the structure of southern shelf is dominated by temperature, while the northern shelf is dominated by salinity. In addition, the location of the boundary between the southern shelf and northern shelf appears to vary from one year to the next and is mainly, but not completely dependent upon maximum ice extent during the spring.

#### 1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

#### 1.4. Actual or planned temporal coverage of the data:

2005-04-21 to 2005-09-28

#### 1.5. Actual or planned geographic coverage of the data:

W: -175, E: -160, N: 65, S: 55

#### 1.6. Type(s) of data:

(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

#### 1.7. Data collection method(s):

(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)

Instrument: human identification of samples, SeaCat, CTD

Platform: wire, bongo

Physical Collection / Fishing Gear: bongo, CalVET, CTD, Seacat

#### 1.8. If data are from a NOAA Observing System of Record, indicate name of system:

#### 1.8.1. If data are from another observing system, please specify:

#### 2. Point of Contact for this Data Management Plan (author or maintainer)

#### 2.1. Name:

Tiffany C Vance

#### 2.2. Title:

Metadata Contact

#### 2.3. Affiliation or facility:

Alaska Fisheries Science Center

#### 2.4. E-mail address:

tiffany.c.vance@noaa.gov

#### 2.5. Phone number:

#### 3. Responsible Party for Data Management

Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

#### 3.1. Name:

Kimberly Bahl

#### 3.2. Title:

Data Steward

#### 4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

No

4.2. Approximate percentage of the budget for these data devoted to data management ( specify percentage or "unknown"):

Unknown

#### 5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Lineage Statement:

See InPort entries 26275, 26373 and 26570.

- 5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:
- **5.2. Quality control procedures employed (describe or provide URL of description):** See InPort entries 26275, 26373 and 26570.

#### 6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

- 6.1.1. If metadata are non-existent or non-compliant, please explain:
- 6.2. Name of organization or facility providing metadata hosting:

NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

#### 6.3. URL of metadata folder or data catalog, if known:

https://inport.nmfs.noaa.gov/inport/item/17100

#### 6.4. Process for producing and maintaining metadata

(describe or provide URL of description):

Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: https://inport.nmfs.noaa.gov/inport/downloads/data-documentation-procedural-directive.pdf

#### 7. Data Access

NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

#### 7.1. Do these data comply with the Data Access directive?

No

# 7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

No

### 7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

None

#### 7.2. Name of organization of facility providing data access:

Alaska Fisheries Science Center

#### 7.2.1. If data hosting service is needed, please indicate:

#### 7.2.2. URL of data access service, if known:

http://ecodaat.afsc.noaa.gov http://epic.noaa.gov

#### 7.3. Data access methods or services offered:

**Contract Distributor** 

#### 7.4. Approximate delay between data collection and dissemination:

varies

## 7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

Samples require human identification and analysis

#### 8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

#### 8.1. Actual or planned long-term data archive location:

(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)

Other

#### 8.1.1. If World Data Center or Other, specify:

http://ecodaat.afsc.noaa.gov

#### 8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

#### 8.2. Data storage facility prior to being sent to an archive facility (if any):

Alaska Fisheries Science Center - Seattle, WA

### **8.3.** Approximate delay between data collection and submission to an archive facility: varies

# 8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?

Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection

local and offsite backups

#### 9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.